CHAPTER 10

THE BRAKING SYSTEM

GABRA2, GABRB3, AND THE GENETICS OF CRAVING

WHY SOME PEOPLE CAN STOP AFTER ONE—AND WHY YOU CAN'T, AND WHY IT'S NOT YOUR FAULT

10.1

[illegible]

> **[illegible] - [illegible]-10.001.**
>
> *[illegible]—[illegible], [illegible], [illegible] MTHFR [illegible] COMT [illegible] CYP2D6 [illegible], [illegible] DRD2 [illegible]*
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> *[illegible]: [illegible]?*
>
> *[illegible]-[illegible], [illegible] - [illegible] GABA [illegible], [illegible] GABRA2 [illegible] GABRB3 [illegible]*
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> *[illegible], [illegible]*
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> *— [illegible]*

[illegible], [illegible]—[illegible], [illegible]

[illegible] GABA -- [illegible]-[illegible] -- '[illegible], [illegible] "[illegible]", [illegible] GABA [illegible] "[illegible]"[illegible] GABA [illegible] '[illegible], [illegible] '[illegible], [illegible], [illegible]

[illegible], [illegible], GABRA2 [illegible] GABRB3 [illegible]

GABRA2 [illegible] GABA-A [illegible]-2 [illegible] — [illegible] '[illegible], [illegible], [illegible] GABRB3 [illegible]-3 [illegible], [illegible] '[illegible]

[illegible] [illegible] [illegible] [

(ACEs) [illegible], [illegible] '[illegible]-[illegible] GABA [illegible] - [illegible], [illegible], [illegible] (cortisol) [illegible] "[illegible]-[illegible]" [illegible]: [illegible], [illegible], [illegible] '[illegible]-[illegible]

[illegible]-[illegible]

GABRA2 [illegible] '[illegible] — [illegible] — [illegible] '[illegible]' [illegible], [illegible], [illegible], [illegible]-[illegible], [illegible], GABRA2 [illegible], [illegible]

GABRB3 [illegible]

GABRB3 — GABA-A [illegible]-3 [illegible] — [illegible] GABRA2 [illegible] GABRA2 [illegible] '[illegible], [illegible] GABRB3 [illegible] '[illegible], [illegible] GABA [illegible] GABRB3 [illegible] compromised [illegible], [illegible] GABAergic [illegible] — [illegible], [illegible], [illegible] GABA [illegible], [illegible]-[illegible]... [illegible] GABRB3 [illegible], [illegible]

10.3

[illegible]-[illegible].

| [illegible] - [illegible]-10.002.

> *[illegible] GABRA2 [illegible], [illegible]*
>
> *[illegible], [illegible] GABA-A [illegible] '[illegible], [illegible], [illegible], [illegible]*
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> *[illegible] "[illegible]" [illegible]*
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> *[illegible]: [illegible]*
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> *— [illegible]*

[illegible], [illegible] "[illegible]" [illegible]: [illegible]

[illegible]:

> [illegible] — [illegible]
>
> **[illegible]:** [illegible] **GABRA2** [illegible], [illegible] '[illegible]-[illegible]-[illegible], [illegible]
>
> **[illegible]:** [illegible] **GABA-A** [illegible] **מערכת** [illegible] - [illegible] - [illegible] '[illegible] **GABA** [illegible]
>
> **[illegible]:** [illegible] "[illegible]" [illegible] "[illegible]" [illegible] **1** [illegible]—[illegible], [illegible]
>
> **[illegible]:** [illegible] **GABA** [illegible]: [illegible], [illegible] **GABA** [illegible] '[illegible], [illegible], [illegible]
>
> **[illegible]:** [illegible] **GABA** [illegible] — [illegible], [illegible] — [illegible] **GABA** [illegible]-[illegible] **(chronic downregulation)** [illegible],

> [illegible] [illegible], [illegible] [illegible] [illegible]

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0–8	[illegible] GABRA2/GABRB3 [illegible] COMT [illegible] MTHFR [illegible]
9–15	moderate [illegible] GABA [illegible] GABRA2 rs279858 [illegible]
16–22	[illegible] GABRA2/GABRB3 [illegible]
23+	[illegible]

10.5

[illegible]

[illegible] - [illegible]-10.003.

[illegible] MTHFR [illegible] COMT [illegible] GABRA2 [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] "[illegible] GABA [illegible]"

— [illegible]

| [illegible] | [illegible] | [illegible] [illegible] [illegible] [illegible]:

* [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
* [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
* [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
* [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]:

* [illegible] [illegible] [illegible]
* [illegible] [illegible]
* [illegible]
* [illegible]
* [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] **findahelpline.com** '[illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [

		[illegible]	
COMT Met/Met ([illegible]) + GABRA2 [illegible].	[illegible]	[illegible]— [illegible], [illegible] '[illegible]	[illegible] 600–800mg, [illegible] L-[illegible], [illegible]-[illegible], GABA-[illegible], [illegible] COMT [illegible], [illegible], [illegible] GABA-[illegible]
MTHFR T/T + GABRA2 [illegible]	[illegible].	[illegible], [illegible], [illegible] GABRA2 [illegible], [illegible], [illegible]	[illegible]-[illegible] (GABA) [illegible], [illegible] '[illegible]
GABRA2 [illegible] + ACEs ([illegible])	[illegible]-[illegible]	[illegible] GABRA2 [illegible], [illegible], [illegible]	[illegible]-[illegible]— [illegible] GABA [illegible]

10.6

[illegible]

[illegible] [illegible] [illegible] [

[illegible]-[illegible] '[illegible] GABA [illegible], [illegible] ([illegible]) [illegible]/[illegible]

[illegible]-[illegible]

[illegible] - [illegible] 1,000 [illegible]

[illegible] GABA-[illegible] — [illegible] GABA-A [illegible] GABA-B [illegible], [illegible] '[illegible], [illegible] GABA [illegible]

[illegible]

[illegible] - [illegible] '[illegible] 3 [illegible]

[illegible] '[illegible], [illegible] GABA [illegible] '[illegible] — GABRA2 [illegible]

[illegible] (sleep quality) [illegible] "EMERGING" [illegible] (inhibitory neurotransmission support) [illegible] "PROBABLE" [illegible]

[illegible] (GABA) [illegible] (250–750 [illegible].[illegible])[illegible]

[illegible] GABA [illegible] (CNS) [illegible], [illegible]— [illegible] GABA [illegible] ansport [illegible]/[illegible]: [illegible], [illegible]

[illegible]

[illegible] — [illegible] 2 — [illegible] ([illegible])[illegible]

[illegible] (GABA) [illegible], [illegible] '[illegible], [illegible]

[illegible] / [illegible] — [illegible]

[illegible] GABA-A [illegible] GABA [illegible] '[illegible]' [illegible] GABA [illegible] GABA [illegible] '[illegible]' [illegible]

[illegible]

[illegible] — GABA-B [illegible]

[illegible] GABA-B [illegible] (GABRA2-[illegible]) [illegible]

[illegible] (KSM-66 [illegible]) — [illegible] 600mg.

[illegible] GABA-A [illegible] 1 [illegible] 2 [illegible] GABA [illegible]

[illegible] GABA [illegible]

[illegible] / [illegible] — [illegible]

[illegible] GABA [illegible] (GABA reuptake inhibition) [illegible] GABA [illegible] (GABA synthesis augmentation) [illegible]

[illegible] — [illegible] 3 — [illegible]

[illegible]

GABRA2 [illegible]

[illegible] - [illegible]

[illegible]

[illegible]

[illegible] 2 [illegible] - [illegible]

[illegible]

4-7-8 [illegible].

4 [illegible] 7 [illegible] 8 [illegible] (vagus nerve) [illegible] (GABA-dominant) [illegible] (vagal pathway) [illegible] (GABA receptor) [illegible]

GABRA2 [illegible]

[illegible] / [illegible] (GABRA2 [illegible])

[illegible] COMT Val/Val ([illegible]) [illegible] GABRA2 [illegible]

> [illegible] [illegible] [illegible]

4. [illegible]

[illegible] GABA [illegible], [illegible] [illegible] (MTHFR), [illegible] [illegible] [illegible] [illegible] (COMT Met/Met), [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] (COMT Val/Val) [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

> *[illegible]*
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> *— [illegible]*

[illegible] **10** [illegible] — [illegible]

Crisis Resources: 988 (Suicide & Crisis Lifeline) | Crisis Text: HOME to 741741 | SAMHSA: 1-800-662-4357

[illegible]-[illegible] [illegible] — [illegible] 10 [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] GABRA2 [illegible] [illegible] [illegible] [illegible] GABA [illegible] [illegible] GABRB3 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] GABRA2 [illegible] [illegible] [illegible] [illegible]

[illegible]	[illegible] [illegible]	[illegible]	[illegible] [illegible]	[illegible]	[illegible] [illegible]
GABRB3	rs1497577 / [illegible] [illegible] [illegible]	[illegible] / [illegible]	[illegible] (GABA) [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] (delirium tremens) [illegible] [illegible] [illegible]	[illegible]	P01 | P13 | P44
GABRB3	rs1497577 / [illegible] [illegible] [illegible]	[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]; GABA-B [illegible] [illegible] [illegible]	[illegible]	P06 | P20
GABRA2	rs279858 | T | [illegible]-[illegible]	[illegible] ([illegible])	[illegible]/[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] '[illegible] [illegible] [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] (AUD) [illegible] [illegible]; [illegible] [illegible]	[illegible]	P01 | P06 | P20
GABRA2	rs279858 | T | [illegible]-[illegible] + ACEs	[illegible] [illegible] [illegible] [illegible] [illegible]	GABRA2 [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible]	P06 | P21 | P22

			[redacted]		
GABRA2	rs279827 | T | [redacted]	[redacted] / [redacted]	[redacted]	[redacted]	P20 | P21 | P34
GABRA2 + COMT Met/Met	[redacted]	[redacted] / [redacted]	[redacted]	[redacted]	P06 | P09 | P10 | P21
GABRA2 + COMT Val/Val	[redacted]	[redacted] / [redacted]	[redacted]	[redacted]	P06 | P10 | P20 | P21
GABRA2 + MTHFR T/T	[redacted]	[redacted]	[redacted]	[redacted]	P06 | P07 | P11 | P21

[redacted]